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The Physically Handicapped Student In Medical School: A Preliminary Study

Maggi Moore-West, Ph.D., and Debbie Heath

Abstract—The research reported here was undertaken as a preliminary study of the physically handicapped student in undergraduate medical education because of the lack of information on the physically disabled in schools of medicine or in medicine itself. A questionnaire was mailed to all medical schools in the United States. Results show very few problems with either the students' academic performance or the institutions' adaptation. Furthermore, when a school accepts one physically disabled student, there appears to be a tendency for the school to accept more.

The equal rights of the physically handicapped have been a legal issue since Section 504 of the Rehabilitative Act of 1973 (1) was enacted. A review of the literature through the use of MEDLINE and ERIC (Education Resource Information Center) revealed little relevant information on the physically disabled in medicine or in schools of medicine. An article (2) by a recent medical school graduate addressed the perceived concerns of medical schools regarding the impact which admitting a physically disabled student might have on the standards for medical schools and on the overall costs of educating students in medicine. While several authors have examined the educational benefits for and rigors of the physically disabled in such professions as social work (3), none has addressed the problems unique to the intensive academic pressure and physical endurance demanded in a medical career. As a result, the present study was undertaken in an attempt to learn the numbers and types of physically disabled students enrolled in schools of medicine, the students' adaptation to the demands of medical education, and the amount of institutional accommodations required by the entry of this new minority.

The study on which this article was based was partially funded by the W. K. Kellogg Foundation and a research grant from the Department of Family, Community, and Emergency Medicine at the University of New Mexico School of Medicine, Albuquerque.

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Methods

A three-page questionnaire was developed by a medical sociologist and a medical student at the University of New Mexico School of Medicine to determine: (*a*) the number of physically disabled students in undergraduate medical education, (*b*) the types of disabilities of the students, (*c*) the students' adjustment to their educational process, and (*d*) the institutional accommodations necessitated by particular disabled students. A draft of the questionnaire was critiqued by faculty members of the school's Department of Family, Com-

munity, and Emergency Medicine and by the dean of undergraduate medical education. After revisions, the questionnaire was sent to the deans of student affairs in all accredited U.S. medical schools (n = 117) during the spring of 1980. The questionnaire was accompanied by a cover letter explaining the intent of the research and expressing the hope of eventually establishing an information network among the schools. When several schools expressed an initial concern about the validity of the survey, a second letter was mailed to all schools indicating that the project was funded by the Department of Family, Community, and Emergency Medicine at the University of New Mexico School of Medicine and that there had been communication with the Association of American Medical Colleges about the survey. A third and final reminder note was mailed in January 1981.

The questionnaire cited examples of what was meant by a physically disabled person (for example, wheelchair bound, blindness, deafness) and asked the schools to indicate the number of handicapped students admitted to their school within the past five years.

Results

Sixty-two schools responded to the questionnaire. Of those responding, 20 schools indicated that no handicapped students had been accepted or had matriculated. Thirty-seven schools indicated that at least one physically disabled student had been enrolled in their schools. Five schools responded that they did not keep such data and, therefore, had no way of retrieving the information.

SCHOOLS WITHOUT HANDICAPPED

For the 20 schools that did not have handicapped students enrolled, the average class size was 87 students, and the average age of the schools was 44 years. The main reason given by nine schools for having no disabled students was that none had applied. Two schools indicated that some handicapped individuals had applied but had not been adequately prepared academically. One school did not admit a physically handicapped student because of the severity of the person's physical disability. One school stated that handicapped students could not be admitted because of rigid physical requirements for all students.

To the question of whether their schools were adequately prepared to deal with a physically handicapped student, respondents of 10 schools felt there would be no problem in admitting a handicapped student. Respondents at two schools felt they were not prepared to deal with handicapped students; however, one respondent thought his school would be ready in the near future. Respondents at two schools felt there would be some problems with the physical arrangements. Three felt there would be some need for extra academic support. Two were concerned about the extra emotional support and one about the possible negative attitude of the faculty.

The benefits of eventually admitting a physically disabled student, as perceived by the respondents, would be that such a student would provide class diversity, a role model for peers and patients, and a new level of awareness by faculty members and students alike.

SCHOOLS ENROLLING HANDICAPPED

Schools admitting physically disabled students had an average class size of 123 students, and the schools had an average age of 67 years. As a group, the schools provided data on an average of 1.9 handicapped students admitted per school, during the studied period, 1976 through 1980.

When the disabilities were categorized by particular handicap (for example, wheelchair bound and deafness) and ana-

TABLE 1

U.S. Medical Schools' Assessment of Handicapped Students Enrolled Between 1976 and 1980

Handicapped Students	Type of Handicap of Students in Medical Schools								
	Wheelchair (n=13)	Visual (n=7)	Amputee (n=11)	Deafness (n=7)	One Arm (n=7)	Hodgkins Disease (n=4)	Cane-Walking (n=6)	Hand Deformity (n=3)	Misc. (n=14)
Accepted by Classmates									
Very well	10	4	8	3	4	2	5	2	9
Well	2	1	2	2	2	2	0	1	5
Average	0	2	1	2	1	0	1	0	0
Poor	0	0	0	0	0	0	0	0	0
Very poor	0	0	0	0	0	0	0	0	0
N.A.*	1	–	–	–	–	–	–	–	–
Academic Performance									
Very well	4	2	2	1	3	0	3	1	5
Well	5	0	2	1	2	3	1	1	4
Average	3	4	7	4	2	1	1	1	3
Poor	0	1	0	1	0	0	0	0	2
Very poor	0	0	0	0	0	0	1	0	0
N.A.*	1	–	–	–	–	–	–	–	–
Graduated									
Yes	4	3	4	7	5	0	0	–	–
No†	9	4	7	0	2	4	6	–	–

* N.A. = No answer.

† Includes two deceased and two who left school. Remainder were still enrolled.

lyzed in terms of the students' academic performance and relationship with peers, no specific problems appeared for any particular category. In fact, very few problems were seen either in the academic or in the interpersonal realm. Of the 72 students eported, 40 did "well" or "very well" academically, and 64 did "well" or "very well" interpersonally. Only five students did "poorly" or "very poorly" academically (Table 1).

When asked whether the schools had any administrative problems providing an adequate education for the physically disabled students, respondents at 19 schools felt that there have been none. Eleven of those schools indicating that there were some problems dealing with the physically handicapped students reported that providing extra emotional support was the most important concern. Three other reported concerns were: providing extra academic support, nine schools; changing faculty attitudes, seven schools; and changing the physical plant, six schools. Respondents at six of the schools indicating a need to change faculty attitudes also expressed a need for extra academic support. Only one school reported a need to change student attitudes. Respondents at two of the schools expressed a need to purchase special equipment, such as a standing wheelchair, for the student to perform adequately in surgery. The five students who had done poorly academically were from five schools which had admitted an average of 3.6 physically disabled students. One student was in a school which indicated a need for more academic support, one in a school needing a change in faculty attitudes, and one in a school needing to administer to both concerns. The other

two schools did not report any problems administratively with admitting the physically handicapped student.

Discussion

Once a school has accepted a handicapped student, results of the study show that the school has tended to accept more students with physical disabilities. This suggests that such students may be more willing to apply to schools where there are already physically handicapped students and/or that such schools have had positive experiences and are willing to accept more handicapped students. These schools are also generally older and have a larger student body and thus may have had more opportunities for exposure to physically disabled house staff and faculty members and more knowledge of the capacity of the physically disabled to function under the physical demands of medicine.

As shown, most of the handicapped students have done well academically. However, as more physically handicapped students are admitted and schools become more comfortable accepting students who might be slightly more at risk academically, the chances of academic problems may increase.

A majority of the schools reporting a need to provide extra academic support for their physically disabled students also indicated a need to change faculty attitudes; this suggests that academic performance is a result of a complex of factors, including student performance, faculty perceptions of student performance, and support from the medical school. The fact that so few students did poorly academically, therefore, might testify to the institutional adaptation as well as to the student capability. The need to provide extra emotional support for the individual handicapped students, however, indicates that, although these students function well academically, there was a certain amount of stress with which they had to deal.

Responses to the survey indicate issues that must be addressed regarding the admission and training of physically handicapped students in medicine. However, based on the results of this study, it can be predicted that those handicapped students accepted to medical school are capable of handling both the physical rigors and academic pressure of medical education without compromising the standards of medicine. If there is a toll, either for the student or for the school, this is not readily apparent.

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